

University Health Network Submission to Kirby

Working towards a
sustainable health care
system

July 12, 2002



University Health Network

Toronto General Hospital Toronto Western Hospital Princess Margaret Hospital

TABLE OF CONTENTS

INTRODUCTION.....	3
BACKGROUND	3
SUMMARY OF RECOMMENDATIONS	4
RECOMMENDATIONS	5
1.0 NATIONAL STANDARDS FOR HEALTH SYSTEM ACCESS	5
2.0 MANDATE NATIONAL STANDARDS AND THE PUBLICATION OF PERFORMANCE MEASURES	7
3.0 ESTABLISH MECHANISMS TO ENSURE LONG-TERM PREDICTABLE CAPITAL AND OPERATIONAL FUNDING	8
4.0 HEALTH HUMAN RESOURCES	9
5.0 INVEST IN THE DEVELOPMENT OF INFORMATION SYSTEMS.....	12
6.0 CREATE INCENTIVES FOR INNOVATION AND RESEARCH.....	13
7.0 SEGREGATE THE MANAGEMENT OF HEALTH CARE FUNDING.....	16
CONCLUSION.....	17
REFERENCES	18
APPENDIX A	19
PROFILE OF THE UNIVERSITY HEALTH NETWORK.....	19
ACADEMIC HEALTH SCIENCES CENTRES.....	19
APPENDIX B	22
PRESSURES FACING ACADEMIC HEALTH SCIENCES CENTRES.....	22
APPENDIX C	31
THE CPP MODEL	31

INTRODUCTION

As the Standing Senate Committee on Social Affairs, Science and Technology moves toward developing recommendations for implementation of the 20 principles detailed in Volume Five, the University Health Network (UHN) welcomes the opportunity to provide input on hospital reform issues.

Background

It was a pleasure to have Senator Michael Kirby as the keynote speaker at the UHN's Board/Senior Management Retreat held on April 19-21, 2002 at Niagara-on-the-Lake. The objective of the retreat was in large part to develop system-level recommendations to sustain Canada's health care system, focusing on four key areas: health care financing, health human resources, innovation and new technology, and the new consumer. Senator Kirby provided the participants with an overview of the Committee's latest report released just a day prior to the Retreat. The recommendations made by the Committee served as the springboard for discussion and debate.

This retreat and earlier deliberations by the UHN Board of Trustees and Management team have resulted in a series of recommendations for consideration by the Senate Committee. Seven major recommendations are highlighted in this submission as critical success factors in ensuring the sustainability of Canada's Health Care System, taken from the viewpoint of an Academic Health Sciences Centre, as well as from a more global perspective on health care.

SUMMARY OF RECOMMENDATIONS

The University Health Network recommends that 7 specific measures be considered by the Standing Committee on Social Affairs, Science and Technology in order to ensure the sustainability of our health care system:

1. Develop national standards for health system access (care contracts);
2. Mandate national data standards and the publication of performance measures;
3. Establish mechanisms to ensure long-term predictable capital and operational funding;
4. Create an environment to retain and attract health care professionals;
5. Invest in the development of information systems;
6. Create incentives and invest in innovation and research; and
7. Segregate the management of health care funding.

The structure of this brief is centred around each of these seven recommendations. At the start of each section we highlight the challenges faced by the health care system that serve as the impetus for the recommendations. The remainder of each section details specific strategies as to how to achieve the recommendation. In addition, *Stories from the Point of Care* provide short, real life illustrations of the problems at hand. The pressures facing Academic Health Sciences Centres are described in more detail in Appendix B.

RECOMMENDATIONS

1.0 National Standards for Health System Access

It is recommended that the Federal Government establish a Care Contract for Canadians that guarantees a maximum wait time for diagnostics and treatment.

Through the Senate Committee's work, it is clear that Canadians feel they do not have reasonable access to the health services they require. This issue concerns both long wait times and the lack of access to technology that is a standard of care in other parts of the world. Canadian health care professionals are frustrated by their inability to offer appropriate diagnostics and treatment on a timely basis. In order to ensure that patients receive the right care at the right time, three issues must be addressed:

- 1) Affirm, through extensive national public consultation, the specific treatments and services that Canadians must be able to access, consistent with the *Canada Health Act* (including home care and long term care);
- 2) Identify appropriate wait time standards for access to care;
- 3) Provide sufficient funding for proven technology in order to maintain standards of care.

STORIES FROM THE POINT OF CARE Endoscopic Ultrasounds – inexpensive and inaccessible

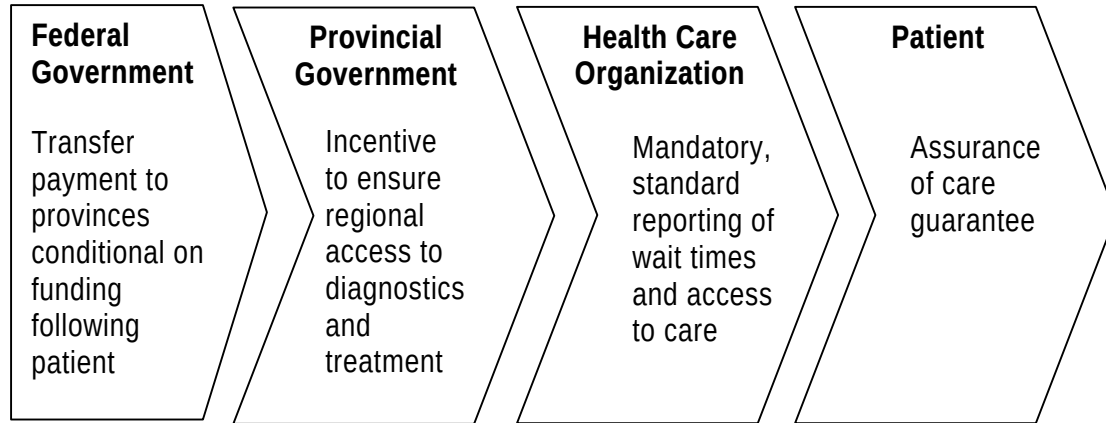
Use of endoscopic ultrasounds in the treatment of esophageal and pancreatic cancers, as well as gastric lymphomas are a standard of practice in the management of these malignancies. However, University Health Network patients do not have access to this simple, and relatively inexpensive piece of technology due to limited funding for capital equipment. This problem is exacerbated by the fact that successful academic clinical research is dependent on access to medical technology, thereby hampering the organization's advancements in research and practice.

Constitutionally, governments are required to fund the public system so that it can provide reasonable access to medically necessary services.¹ As part of the proposed Care Contract, it is recommended that if the minimum standard for access is not met, a patient has the right to access care outside his/her region (i.e. outside the province/territory or country).

¹ C.D. Howe Institute, 2002: The Charter and Health Care

Enforcement of the proposed care contract would require that specific accountability mechanisms be established.

Figure 1: Accountability Mechanism for Care Contracts



In order to determine appropriate national standards for access it is therefore recommended:

1. That the Federal Government initiates a national public consultation process to affirm the specific diagnostics and treatments that Canadians must be able to access, consistent with the *Canada Health Act*.
2. That the Canadian Institute for Health Information be given the responsibility to:
 - Research, identify and substantiate wait time standards;
 - Recommend critical mass thresholds for selected procedures to ensure that clinically safe volume thresholds are maintained to promote excellence;
 - Recommend waiting list protocols (standardized data collection and reporting mechanisms).

2.0 Mandate National Standards and the Publication of Performance Measures

It is recommended that the Federal Government mandate national data standards and the publication of performance measures, including specific measures for patient outcome, access, financials, human resources and innovation.

Funding by the Federal and Provincial Governments should be tied to a clear and measurable accountability mechanism. Through common measurement and reporting standards, health care organizations should be expected to demonstrate improvements in access, outcomes and/or efficiencies with the additional funding. The ground-breaking work of the Canadian Institute for Health Information should be supported and expanded through comprehensive and comparable national reporting to the public on targeted performance measures of health care organizations. This would not only empower consumers, but also provide a powerful incentive for organizations, through consumer choice, to focus their efforts in improving the system of care.

Currently, accountability and performance measurement are sorely lacking in the health care system. Though the performance of the health care system is largely a provincial issue, the Federal Government can show leadership in this area by mandating the collection and publication of standardized data across the country. The mandatory reporting of measures would allow Canadians to see how the health care system is performing across hospitals, cities, regions and provinces. In addition, hospitals throughout Canada should be able to compare their performance based on reliable, accurate and timely statistics.

Building on the work of the Canadian Institute for Health Information, the Federal Government should mandate national data standards and the publication of performance measures including specific elements for academic health science centres. National reporting should include measures for patient outcomes; access; financials; human resources; and innovation.

Once the national data standards are set, the Federal Government should ensure a process to develop national performance standards for the health system.

3.0 Establish mechanisms to ensure long-term predictable capital and operational funding

It is recommended that the Federal Government establish mechanisms to ensure long-term predictable capital and operational funding.

Recent media reports have highlighted the current fiscal challenge for health care organizations. For 2002/2003, the Ontario government announced funding for hospitals three months into the fiscal year. As a result, hospitals have had to deplete cash reserves and/or borrow funds in order to sustain operations. Unpredictable funding hinders excellence, efficiency, the ability to plan effectively and good management practice.

This long-term predictable funding extends beyond operating funds. Lack of access to proven, modern medical equipment results in compromised Canadian health outcomes and standards of care. The absence of standard technology hinders our national ability to contribute to a global medical body of knowledge. It also diminishes our ability to compete globally in innovation and research in diagnostics and treatment.

It is strongly recommended that the Federal Government ensure long term and sustained funding to address the capital needs of the health care system. It is recommended that the Federal Government immediately consider alternate options for increasing capital investment (e.g. matching grant programs, philanthropy, public/private partnerships).

The UHN also recommends that the federal government establish mechanisms to ensure long-term predictable transfer funding that includes:

- a counter-cyclical element in the transfer formula so that dramatic changes in Federal transfers for health services do not occur from year to year;
- a tie to commonly agreed upon indices (e.g. health care inflation, economic growth, demographic changes)
- an earmarked transfer element for academic health sciences centres as national resources for innovation, highly specialized services, the education of health professionals, and the translation of research into clinical practice.

4.0 Health Human Resources

It is recommended that the Federal and Provincial Governments create the environment to retain and attract health care professionals.

Canada is competing on a global level for qualified health care professionals. Many North American jurisdictions face health human resources shortages. Exacerbated by these shortages are the serious problems of job dissatisfaction and low morale among health care providers.

In an environment where demand for health services continues to increase, Canada's health care system will experience a shortage of skilled health human resources for many years.

To be a contender in the competitive international market for health care professionals it is recommended that the Federal and Provincial Governments develop a comprehensive national health human resources strategy that addresses the following issues:

STORIES FROM THE POINT OF CARE Acute shortages of anaesthesiologists significantly cuts OR time

In December 2001, the University Health Network reduced operating room activity by 15%. Further reductions of an additional 10% were made at the Toronto General Hospital as of April 1st due to the chronic shortage of anaesthesiologists. Even further reductions during the month of June have forced a 25% reduction in activity at the Toronto Western Hospital and 35% reduced activity at the General.

As a result, wait lists for surgery continue to grow.

1. Produce the right supply and mix of health care professionals.

An effective national health human resources strategy must anticipate the health needs of Canadians and must determine the appropriate supply, mix and distribution of health human resources to meet demand.

The creation of additional education seats for all health care disciplines is a fundamental approach to alleviating the workforce shortage. It is also critical to determine a more appropriate mix of health care professionals to provide the "right care, by the right people". Change in scope of practice and ensuring the proper skill mix will optimize existing resources, improve outcomes/quality of care and efficiency, enhance innovation and improve workforce morale.

2. Link between education and practice

In a recent report by the Canadian Institute for Health Information², Dr. Ben Chan examined the causes of Canada's current physician workforce shortage. Dr. Chan concludes that an increase in the training time physicians have spent in postgraduate training over the past decade has significantly reduced the physician supply.

The increase in education time also holds true for nursing and allied health professionals. There is an obvious, direct educational impact on health human resources supply.

The University Health Network agrees with additional training time to enhance the skill set of future health care professionals. However, more education seats must be created to compensate for the additional training time and the corresponding reduction in supply. Furthermore, it is recommended that the government establish mechanisms to increase the supply of alternative/supportive health care staff (e.g. nurse anaesthetists). The benefits of increasing the capacity of these alternative groups of health care providers are two-fold. It would:

- help to alleviate the pressures felt by workforce shortages; and
- contribute to a more effective mix of skills and professionals.

3. Market industry to make health care a career choice

Over the past decade there has been frequent negative media attention on the increasing workplace demands of health care professionals. Professional lobbyists and advocacy groups, along with health care unions have contributed to creating a negative stereotype of the overworked, under-appreciated health care professional. While drawing needed attention to the significant problems of the health care system this publicity has reduced our ability to attract and retain the best and brightest of the next generation of health care professionals.

In order to attract young people to the industry, much work is needed to change the growing negative perception of health care. It is recommended that the Federal Government launch a major marketing campaign, much like the one developed for the Canadian National Armed Forces, in order to promote health care as a career path of choice. This recommendation applies not only to the practice of medicine, but especially to nursing and allied health professions.

² CIHI, 2002: From Perceived Surplus to Perceived Shortage: What Happened to Canada's Physician Workforce in the 1990s?,

4. Address global competitiveness

A major national concern is the perceived “brain drain” to the United States and other parts of the world. For the health care industry, where resource capacity issues are worldwide, the competition for top-rated clinicians and researchers is intense. The ability to attract qualified health care professionals is hampered by the lack of access to (basic) technology for clinical practice and research, in addition to the inability to offer internationally competitive compensation.

In order to be internationally competitive, the University Health Network restates its recommendation that the Federal Government ensure long term funding to address the capital needs, as well as invest in human resources funding to attract and retain qualified health care professionals.

5.0 Invest in the Development of Information Systems

It is recommended that the Federal and Provincial Governments make on-going and significant capital investment in information systems across the health care system

Progress in the development of a standardized, comparable performance measurement system in health care is largely hindered by the lack of resources invested into health information systems to date. Effective, informed patient and financial management in health care can only come with the development of integrated information systems. Real-time communication of patient information across the health care system and to patients is critical to high-quality health care delivery.

In addition to the \$500 million already committed to information systems improvement, the Federal Government, along with provincial governments, should make an on-going and significant capital investment in information systems across the health care system. The upfront investment required to make significant progress is in the range of \$500 million per year for the next five years.

In addition, academic health sciences centres should be funded to research and evaluate new information technologies, particularly in the area of eHealth (e.g., internet, telemedicine, wireless technologies).

The Canadian health care system is already behind other businesses in information system investment. The Federal Government needs to consider how to make rapid progress, while ensuring integrity in a national information system (e.g., create a new corporation accountable to government; provide additional resources and greater mandate to existing organizations such as the Canadian Institute for Health Information; facilitate private/public sector partnerships).

6.0 Create Incentives for Innovation and Research

It is recommended that the Federal Government create incentives for and invest in innovation.

Funding for New Technology

Innovation is currently not a strength of the Canadian health care system. Canada adopts other countries' technology and practice, but builds and develops little new technology domestically. Without achieving minimum standards of care and access to basic technology, creating and encouraging innovation and research is a futuristic goal, currently beyond our grasp.

The Federal government's recent funding of technology is a welcome initiative in addressing the gap in the availability of high-tech equipment. However, along with the cost to purchase such equipment there is also a cost to introduce proven technology, evaluate its effectiveness, and cover ongoing operating costs.

Based on this reality it is recommended that the Federal Government provide targeted funding for the identification, purchase, operation and evaluation of new technologies for a predefined period, e.g. three years. This funding would facilitate reporting on the efficiency and efficacy of the technology and be used by the Provincial/Territorial government(s) to assess ongoing operational funding. Such a proposal has a number of advantages:

- Improves consumer access to advanced treatments by fast tracking the introduction of new technologies;
- Contributes to a national standard of treatment;
- Relieves the Provincial/Territorial governments of funding the technology in the early stages, thus encouraging innovation as opposed to the rationing of such services; and
- Results in an evaluation of the technology in a real life setting permitting rationale decision-making on whether such technology should be more broadly adopted and under what circumstances.

Academic Health Science Centres, with their tri-partite commitment to excellent clinical care, research and education, are ideally positioned to partner with the Federal Government.

Incentives for Innovation

The lack of funding for innovation, research and development in Academic Health Sciences Centres promotes a national culture within the health care system in which innovation is not valued.

Two recommendations are made, to promote innovation within health care organizations:

- 1. Funding rates must be regularly reviewed in order to stay current with the cost of technology, change in practice, and other environmental factors.**

As new procedures become generally accepted, funding rates should be adjusted to reflect this change in practice. For example, the University Health Network has started to perform some craniotomy procedures as day procedures. However, the current case grouping methodology for day procedures does not recognize the craniotomy procedure as a valid day procedure, and these cases are consequently assigned to a lower-weighted miscellaneous grouping, thereby penalizing the organization for the new practice.

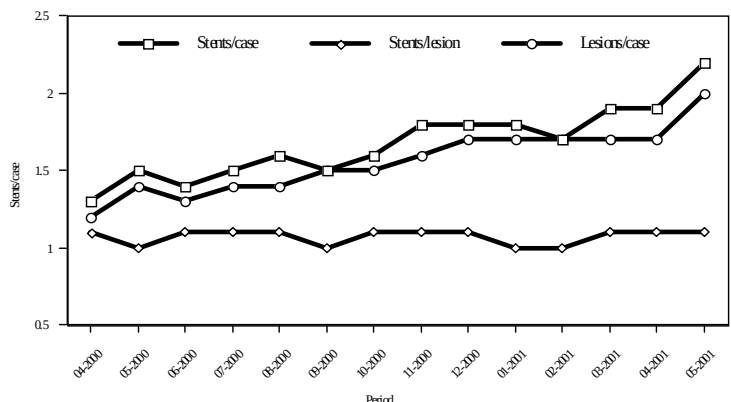
- 2. Targeted funding is required to introduce innovative medical procedures and practices.**

A method for funding research and development work is required. Separating the funding for investigative clinical introductions would serve to provide the incentive for academic hospitals to continue to develop leading-edge innovative technology and standards of practice.

STORIES FROM THE POINT OF CARE

Multi-vessel/multi-lesion revascularization: The practice change is not reflected in the funding rate

All teaching hospitals are treating more patients with multi-vessel/multi-lesion revascularization. The Ontario government funds only 1.2 stents/case (represented by the bottom line). However, due to the complexity of cases, standard practice has resulted in a greater number of stents/case (represented by the top line). Rates have not reflected this change in practice. The discrepancy between the provincial government's funded volume and the standard of practice at University Health Network is represented by the area between the upper line and the lower line. The difference is funded by the hospital's global budget that inappropriately diverts those funds from other services. Clearly, rates need to be adjusted in a timely manner to reflect change in practice (and complexity).



Today's innovative medicine at academic health science centres is tomorrow's standard of practice at community hospitals. Targeted innovative funding must be implemented to encourage academic health science centres to pursue these new and highly specialized procedures.

Funding for Innovation

In order to support and encourage innovation at a national level, it is recommended that more funding be provided to existing funding bodies, such as the Canadian Institutes for Health Research, specifically for the advancement of translational research (from "benchside to bedside").

Furthermore, it is recommended that new funding programs be created to support the development of new technologies, effective process redesign, information systems and other non-clinical health innovations.

Significant increased funding support for innovation is crucial for Canada to improve its global contribution to health care advances and new technology.

Funding for Research

The Federal Government should provide increased funding to support research programs in AHSCs. This funding should be allocated to:

- creating additional research infrastructure (buildings and labs) in AHSCs and cover the associated operating costs (heating, lights, maintenance);
- covering the indirect costs of research that are now absorbed by academic health sciences centres (e.g., principal investigators, research equipment, computers);
- covering the costs of translating research into clinical practice;
- supporting research into best practice in order to control practice variation and optimize outcomes.

7.0 Segregate the Management of Health Care Funding

It is recommended that the Federal and Provincial Governments segregate the management of health care funding.

Since 1990, 85 health ministers and 79 deputy ministers of health have served at the federal, provincial or territorial level of government, across Canada.³ The median term, from 1990 to 2001, for a provincial minister was 25.7 months and for a deputy minister, was 20.9 months. This high rate of turnover of top-ranking government officials creates constant and significant turmoil for the health care system.

It is recommended that the Federal and Provincial Governments bring stability to health care funding and planning through two avenues:

1. Segregate health care funding; and
2. Create a crown corporation to manage the funding of the health care system.

Segregate health care funding

In order to remove funding decisions from the political arena it is recommended that the Federal and Provincial Governments build up a secured insurance fund and reserve it for health care. A secured insurance fund would help to create a stable and predictable level of funding and would remove the federal-provincial “tug of war” that currently exists.

Create a crown corporation to manage health care funding

The intricate interdependencies in health care (i.e. determinants of health, continuum of care, etc.) and the lack of comparable and comprehensive system-level information makes effective management of Canada’s health care system tremendously difficult. When political agendas are added to this mix a turbulent, reactive, “ripped from the headlines” approach to health care management results. For this reason, it is recommended that health care system funding be managed by an arms-length, crown corporation, (modeled after the Canada Pension Plan, Appendix C) in order to remove health care funding as a political “hot potato”. A single, national body to control and manage health care spending facilitates focused decision-making, acting with one vision.

³ CIHI, 2002: Health Care in Canada 2002

CONCLUSION

The Standing Committee on Social Affairs, Science and Technology is reviewing health care at a critical time in our history, and will have to balance a number of priorities in a system with limited resources. The University Health Network is optimistic about the role it and its fellow academic health sciences centres can play, and looks to the Committee to recognize its unique contributions and place in the health care delivery system. Focused attention to and support of a number of critical issues in the areas of highlighted in this submission will help ensure the sustainability and continued excellence of the Canadian health care system.

REFERENCES

Canadian Institute for Health Information. 2002. "Health Care in Canada 2002"

Chan, Ben. 2002. "From Perceived Surplus to Perceived Shortage: What Happened to Canada's Physician Workforce in the 1990s?" *Canadian Institute for Health Information*.

Hartt, Stanley and Monahan, Patrick. 2002. "The Charter and Health Care" Guaranteeing Timely Access to Health Care for Canadians." *C.D. Howe Institute Commentary, The Health Papers*, No. 164.

APPENDIX A

Profile of the University Health Network

The University Health Network was founded in 1998 with the merger of The Toronto Hospital (Toronto General and Toronto Western Hospitals) and Princess Margaret Hospital. These three hospitals have a long and distinguished history in the delivery of health care services, have greatly contributed to the education of generations of health care professionals, and have discovered new methods of preventing and treating disease. Nine thousand staff are employed at the University Health Network (including physicians), and the organization has over \$800 million in annual revenues. As an academic organization, we carry out almost \$100 million in research per year and teach 3,000 students.

The vision of the University Health Network is to have global impact through the provision of exemplary health care and through knowledge creation.

Academic Health Sciences Centres

AHSCs generally comprise a hospital or network of hospitals with clinical programs ranging from primary to highly specialized patient care, and in many provinces are part of health regions that span the entire continuum of care. In addition to patient care, AHSCs have a partnership with a faculty of medicine for the provision of undergraduate and postgraduate medical education. Frequently, they also have affiliations with one or more professional schools for the training of nursing and allied health professionals. Finally, AHSCs provide environments for nurturing basic and applied research.

AHSCs fulfil a number of unique roles in the health care system and have some unique features, including:

- being the hospitals of last resort for the most acute patients unable to be treated in other hospitals
- developing and evaluating new therapies, treatments, and technologies
- being test-beds for health info-structure innovation
- providing the primary educational setting for all future medical personnel trained in Canada
- training a range of health care professionals and scientists who work in a wide variety of community and industrial settings
- improving the health of Canadians, and the Canadian economy

- experiencing care delivery costs significantly higher than non-academic settings as a reflection of patient acuity, teaching, research, and infrastructure.

As innovators, AHSCs can help provide solutions to Canada's endless health care crises, positively impact the quality of life of Canadians and contribute to the productivity of Canada's knowledge-based economy.

List of Canadian Academic Health Sciences Centres

(Source Association of Canadian Academic Healthcare Organizations)

St. Paul's Hospital, Vancouver, BC
 Vancouver Hospital, Vancouver, BC
 Hospital Group C, Vancouver, BC
 Calgary Health Authority, Calgary, AB
 Capital Health Authority, Edmonton, AB
 The Caritas Health Group, Edmonton, AB
 Regina Health District, Regina, SK
 Saskatoon District Health Board, Saskatoon, SK
 Winnipeg Health Sciences Centre, Winnipeg, MB
 St. Boniface General Hospital, Winnipeg, MB
 Winnipeg Hospital Authority, Winnipeg, MB
 London Health Sciences Centre, London, ON
 St. Joseph's Hospital Health Centre, London, ON
 Hamilton Health Sciences Corporation, Hamilton, ON
 St. Joseph's Hospital, Hamilton, ON
 Sunnybrook Health Sciences Corporation, Toronto, ON
 University Health Network, Toronto, ON
 St. Michael's Hospital, Toronto, ON
 The Hospital for Sick Children, Toronto, ON
 Mount Sinai Hospital, Toronto, ON
 Baycrest Hospital, Toronto, ON
 Centre for Addiction and Mental Health, Toronto, ON
 Toronto Rehabilitation Institute, Toronto, ON
 Kingston General Hospital, Kingston, ON
 Hotel Dieu Hospital, Kingston, ON
 The Ottawa Hospital, Ottawa, ON
 Children's Hospital of Eastern Ontario, Ottawa, ON
 Sisters of Charity of Ottawa Health Services, Ottawa, ON
 McGill University Health Complex, Montreal, PQ
 Centre Hospitalier de l'Université de Montréal, Montreal, PQ
 Hôpital Sainte-Justine, Montreal, PQ
 Institut de Cardiologie de Montréal, Montreal, PQ
 Hôpital Maisonneuve-Rosemont, Montreal, PQ
 Hôpital du Sacré-Coeur de Montréal, Montreal, PQ
 Institut Universitaire de Geriatrie de Montreal, Montreal, PQ
 Centre Universitaire de Santé de L'Estrie, Sherbrooke, PQ
 Sherbrooke Geriatric University Institute, Sherbrooke, PQ
 Centre Hospitalier Universitaire de Quebec, Quebec, PQ

Institut Universitaire de Cardiologie de L'Université Laval, Sainte-Foy, PQ
Region 2 Hospital Corporation, Saint John, NB
Queen Elizabeth II Hospital, Halifax, NS
The Grace-IWK Hospital, Halifax, NS
Health Care Corporation of St. John's, St. John's, NF

APPENDIX B

Pressures Facing Academic health Sciences Centres

To arrive at the above recommendations, the University Health Network examined closely the major pressures facing AHSCs. Left unresolved, these pressures will seriously impact care delivery, medical education and research over the next 10 years. In order to explain these pressure we have grouped them into the following categories, and included “real-life” examples to illustrate how they play out at the point of care:

- Access to the health care system
- Health human resources shortages
- Education
- Research
- Information systems
- New and emerging clinical technologies and treatments
- Capital equipment and buildings
- Operational funding
- Performance of the system

1.0 Access to the Health Care System

Access problems exist on a daily basis throughout the health care system, but are particularly acute in AHSCs. AHSCs try to balance access into the system (e.g., emergency rooms) with access to highly specialized programs (e.g., bone marrow transplants, and cardiac surgery). In Ontario, where there is no coordinated regional system for managing access, there is diffuse accountability for the appropriate placement of patients.

Current Situation

- Primary Care Access:
 - Emergency rooms are backlogged with patients awaiting an inpatient hospital bed.
 - There is inadequate access to primary care services 24/7.
 - AHSCs are generally located in large urban centres which present the unique problems of downtown cores (e.g., homelessness, HIV, drugs and severe psychiatric disorders).
- Access to Specialty Services:
 - Though the documentation of waiting times is not consistent, it is known

that there are inappropriately long waits for appointments with specialist physicians, access to operating rooms and specialized services and diagnostic testing.

- The decrease in medical residents and the shortage of some types of specialists is adding to the access challenges in AHSCs.
- Access out of the AHSC system:
 - There is pressure to keep patients in hospital after their acute phase because health insurance often does not cover services outside the hospital (e.g., drugs, home nursing care, rehabilitation, homemaking services).
 - Alternate Level of Care days (those days that patients are awaiting placement outside of the acute care stream) are an increasing and particularly expensive problem for the teaching hospital system due to high costs per patient day.

The View from the Point of Care:

- *In May 2001, hospitals in the Greater Toronto Area were on “critical care bypass” (not accepting ambulances) for a total of 5,674 hours (nearly 30% of the time).*
- *In 1999/2000 more than 30% of patients in Ontario waited longer than the recommended maximum of 8 weeks for radiation therapy from the time of referral (Cancer Care Ontario).*
- *In spite of running an MRI machine 24-hours/day at UHN, the wait time for elective tests is 6-8 weeks.*
- *5% of patient days are classified as Alternative Level of Care (patients awaiting placement) in Canadian teaching hospitals.*

2.0 Health Human Resource Shortages

Reports on the shortages and unhappiness of health care professionals permeate the media every day. The key issues for AHSCs are summarized as follows:

Current Situation

- Health care professionals are aging, creating shortages across the developed world.
- Chronic workload problems are causing errors in the delivery of health care and putting patient care and staff at risk.
- Academic physicians are highly sub-specialized and have international

reputations. They are recruited and retained in competition with American AHSCs.

- Nobody in the health care system is looking seriously at redefining skill mix among the health care professions.
- System instability and downsizing in the 1990s has hurt the image of health care professions as a potential career choice.
- There has been little coordination between the education and health systems in planning for future health professional requirements.
- There are no compensation benefits for working in AHSCs with complex levels of care versus community hospitals.

The View from the Point of Care:

- *In 2000, Canada's net migration of physicians out of Canada was 164, the equivalent of a University of Toronto graduating class.*
- *Today, UHN has 85 medical staff vacancies, 16% of its fulltime medical staff.*
- *In UHN's Cardiovascular Intensive Care Unit, 8 beds were closed this summer because of a shortage of nurses, causing a 33% drop in surgical activity. In the Cardiac Care Unit, 4 beds have been closed for the past year.*
- *UHN has invested \$6 million this fiscal year in special retention and recruitment initiatives (e.g., reduced staff parking rates, expanded educational assistance).*
- *The shortage of vascular surgeons in downtown Toronto is so acute that several nights per week, there is only one person on-call for the downtown Toronto population.*

The most serious problem facing health care today is the shortage of health care professionals. Strategies to address this issue are not specifically addressed in this submission, given the provincial nature of human resource planning.

3.0 Education

The medical education system and AHSCs face many challenges – most particularly the lack of compensation for all the volunteer teaching hours, and the shortage of medical residents in the system.

Current Situation:

- AHSC clinical departments provide faculty for teaching in undergraduate and postgraduate medical programs.
- There is no system for remunerating clinical teachers in AHSCs.
- Because of the lack of compensation, it is difficult for AHSCs to attract and retain good clinical teachers, thereby exacerbating human resource

shortages.

The View from the Point of Care

- *Undergraduate education is uncompensated. UHN staff provided 6106 hours in volunteer teaching to years 1 and 2 undergraduates (no patient care is provided, so there is no OHIP billing for these hours of teaching). This statistic does not include preparation time.*

Complexities and inequities in the remuneration of physicians will likely jeopardize the ability of AHSCs to attract and retain highly qualified medical staff and teachers thus exacerbating medical staffing shortages and access issues.

4.0 Research

AHSCs, as the Research and Development arm of the health care system, lead in the creation of new knowledge. Many challenges affect their ability to achieve even greater scientific impact.

Current Situation:

- The indirect costs of research are covered in every major competing jurisdiction in the G8, but are not funded in Canada. This places a significant burden on AHSCs to fund approximately 30% of the costs for research.
- There is a need for more research funding (grants, infrastructure).
- There is a need to fund the translation of research discoveries into clinical practice.

The View from the Point of Care

- *In 2000, the National Institute of Health provided \$180M (US) to the Massachusetts General Hospital compared to \$13.5M (Cdn) from the Canadian Institute of Health Research to UHN.*
- *It is estimated that the unfunded indirect costs of research are consuming approximately 2% of the total operating budgets for teaching hospitals.*

Canada will continue to lose ground for talent and knowledge creation among OECD nations in the international research arena without greater and more equitable funding.

5.0 Information Systems

The health care industry has lagged behind others in adopting information and communication technologies. The paper-based environments in which hospitals operate are highly inefficient and expensive, and in some cases detrimental to the delivery of the highest quality of patient care.

Current Situation

- Coordination of health care services across organizations is inhibited by the lack of investment in information systems.
- There are insufficient national standards for data collection and information systems resulting in business inefficiency and lower productivity (e.g., payroll systems, appointment scheduling, e-commerce).
- The quality of data and information for care planning and evaluation is poor (e.g., ambulatory care data; drug interaction systems at the point of care).
- There is no provincial or national strategy to support or facilitate the movement to an electronic patient record (EPR).

The View from the Point of Care

- *UHN has one of the most aggressive strategies to overhaul information systems in Canada. In addition to 4.1% of operating funds spent on systems, as compared to a national average of 2-3%, UHN is investing \$50 million in capital over five years to upgrade/replace systems to create an electronic patient record, improved telecommunications, and provide better business systems.*
- *Despite this relatively significant investment in IS, UHN cannot adequately fund the level of redundant systems that is common in other industries.*
- *UHN is showing how clinical alerts at the point of care can enhance decision-making and yield improvements in care delivery and efficiency. Clinical alerts notify physicians if the tests they are ordering are not necessary or appropriate (with supporting evidence), or limit standing orders so that they need to be reviewed more often to limit duplication.*

Consumers who can access their bank accounts and wirelessly trade stocks around the world are demanding that their health information be more accessible to them and to their health care providers.

6.0 New and Emerging Clinical Technologies and Treatments

Canada lags behind nearly all other developed countries in the adoption and

diffusion of new and emerging clinical technologies and treatments.

Current Situation

- Because new and emerging clinical technologies are either under-funded or not funded, there is a tendency to purchase cheaper and older models of equipment.
- AHSCs are at a serious disadvantage internationally in recruiting and retaining specialized staff because they do not provide the latest technologies in diagnostics and treatment.
- Canadians are receiving poorer diagnostics and treatments than people in other developed countries.

The View from the Point of Care

- *PET scanners, a diagnostic tool developed in the 1980s and proven to provide the most accurate cancer diagnoses, are still not funded for clinical care in Canada. Princess Margaret Hospital, one of the largest comprehensive cancer centres in North America, does not have one of these diagnostic tools.*
- *There is only one Gamma Knife in Canada versus over 60 in the US and 160 worldwide – a proven technology in the treatment of neurological disorders.*
- *Because the government has not kept pace with the importance of genetics in the prediction and prevention of disease, nearly 3,000 genetic tests were performed in research laboratories at UHN, instead of being provided in a clinical setting with appropriate patient and family counselling.*

The continuing reluctance of the governments to invest in new and emerging technologies and treatments will place Canadians at an increasing disadvantage for access to modern medical treatment and top specialists.

7.0 Capital Equipment and Buildings

The effects of a decade of funding reductions in Canadian healthcare and the lack of long term capital planning are obvious when hospital capital equipment and facilities are examined.

Current Situation

a) Equipment:

- Capital equipment and replenishment have been grossly under funded in hospitals for decades.
- No provincial and/or federal plan exists for systematic investment in capital equipment replenishment/replacement.
- Canada lags behind other OECD countries in investment in capital equipment.

Technology	Canada (#/1,000,000 pop'n)	OECD Average	Canadian Rank
CT Scanners	8.1	12.9	21
Radiation Equipment	5.3	4.2	6
Lithotriptors	0.4	1.4	19
MRIs	1.7	3.9	19

Source: OECD 1998

b) Buildings:

- Building replacement is grossly underfunded and depreciation is not recognized by provincial governments for funding purposes, resulting in the degradation of many hospital buildings.
- Most capital investment decisions are based on short-term responses to needs rather than long-term planning. The result is that additions and renovations are often made to poor structures, when full reconstruction might have been a better long-term decision.

The View from the Point of Care

- *In addition to the \$350 million capital redevelopment plan for UHN (of which \$281 million is raised by way of a bond issue), UHN's facility renewal requirements for the next 10 years are more than \$500 million.*
- *In the 8-bed Neuroscience Critical Care Unit funds were available to buy only four new monitors. The remaining four monitors are more than 20 years old. They are no longer made and if they break down they cannot be fixed.*
- *The oldest endoscope at UHN is so antiquated that only the most senior member of the division of Gastroenterology can operate the equipment.*

8.0 Operational Funding

The results of a decade of hospital funding cuts are increasingly being felt.

There has been no long term, predictable, stable operational funding to facilitate planning of health care services and programs.

Current Situation

- Private expenditures as a percentage of total health care expenditures have increased significantly over the past decade in Canada.
- AHSCs are significantly affected by the high costs of new drugs given their highly specialized programs.
- The Canada Health Act covers all “medically necessary” hospital and physician services. Many elements of the health care system (e.g., drugs, long term care) are not covered under this act, which results in hospitals being pressured to provide services to patients who might otherwise be treated outside the system.

The View from the Point of Care

- *At current growth rates for the industry (7-8% growth/year), UHN operating fund requirements in 10 years are projected to be \$1.5B, up from \$800M today.*
- *In September 2001, UHN had still not received final notice from the Ontario Ministry of Health and Long Term Care regarding funding levels for fiscal 2002.*

AHSCs will continue to feel considerable inflationary and cost pressures as long as the systems for providing predictable operating funds are in such disarray.

9.0 Performance of the System

Increasingly, objective measures are being used to compare the health care services of hospitals, regions, provinces, and countries. As well, many aspects of the performance of the system are not measured consistently or measured at all. It is therefore impossible for consumers or funders to assess the quality of care or how efficiently it is being provided.

Current Situation

a) Standardization of Care Delivery and Best Practices

- The need to implement evidence-based care standards is recognized.
- AHSCs contribute to the field of best practice/evidence based medicine through research programs, balancing “standardized” care delivery with discovering new methods for treating disease.
- Patients are requesting the evidence supporting different treatment

methods.

c) Efficiency and Productivity

- There are few good measures of efficiency and productivity for AHSCs.
- Teaching hospitals are being pressured to perform at community hospital costs in spite of the higher acuity of AHSC patients.
- The relationship between complexity and costs for teaching hospitals are not well understood.

d) Satisfaction

- Hospital surveys indicate decreasing patient satisfaction with the health care system.
- Health care providers are under pressure to prematurely discharge patients from hospitals in order to allow others access.
- Staffing shortages and increasing workload exacerbate satisfaction problems.
- There is a negative perception of health care fuelled by negative media coverage.

The View from the Point of Care

- *Only 15-25% of clinical care provided in hospitals is based on scientific evidence.*
- *There are copious amounts of research being conducted around the world, such as 10,000 clinical trials reported last year alone, making the synthesis and introduction of evidence into medicine increasingly difficult.*

APPENDIX C

The CPP Model

In the case of the Canada Pension Plan, the CPP Investment Board is an investment corporation managed independently of the Canada Pension Plan by experienced investment professionals drawn from the private sector. Their mandate is set out in their legislation:

- To invest in the best interests of CPP contributors and beneficiaries, and
- To maximize long-term investment returns without undue risk of loss, taking into account the factors that may affect the funding of the Canada Pension Plan and its ability to meet its financial obligations.

The CPP Investment Board cannot conduct any business or activity that is inconsistent with these objectives.

They operate independently of the Canada Pension Plan and at arm's length from the federal and provincial governments that were jointly responsible for the creation of the Plan. **Independence from governments in making investment decisions is critical to our success and public confidence in our organization.**

Role of government

The role of government is limited. The federal finance minister, in consultation with the participating provinces:

- Appoints the Investment Board's directors,
- Reviews the Board's legislation and regulations every three years as part of the review of the Canada Pension Plan, and
- Is required to initiate a special examination of the Board's financial and management controls, information systems and management practices, at least once every six years.

The Investment Boards send quarterly financial statements and annual report to all finance ministers. Their annual report must be tabled in the House of Commons each year.

Changes to their legislation and regulations can only be made with the support of the federal government and two-thirds of the participating provinces representing two-thirds of the population.

Accountable to beneficiaries and the public

The Investment Board is accountable to the 16 million Canadians who contribute to or benefit from the Canada Pension Plan and to the general public. They keep the public informed through public meetings that must be held once every two years in every participating province, to review their annual report. The Board also post information and important developments on our web site and issue news releases to the media.

For more information on the CPP Investment Board, please visit their website: http://www.cppib.ca/index_en.html.